

In the United States Patent and Trademark Office

Serial Number: _____

Appn. Filed: _____

Applicant: Ronald F. Balingit

Appn. Title: Smoke Collector for Diesel Engines

Examiner/GAU: _____

Mailed 2004 Feb. 20
Agoura Hills, CA

Information Disclosure Document

Commissioner of Patents and Trademarks
Washington, District of Columbia 20231

Sir:

Attached is a completed Form PTO-1449 and copies of the pertinent parts of the references cited thereon. Following are comments on these references pursuant to Rule 98.

Hartwick shows a self-cleaning smoke filter utilizing water sprays inside a channel provided with baffles.

Doyle, et al., shows an integrated injection and bag filter house system for SO₂-NO_x-particulate control with reagent/catalyst regeneration.

Richerson shows a cyclonic separator with internal baffles to force the gas stream in two directions, and can be enhanced by electrostatic separation.

Altman, et al., shows an electrostatically enhanced separator which combines centrifugal separation and electrostatic separation.

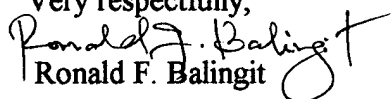
Paul shows a particulate separator which combines centrifugal separation with moisture feeding or electrostatic separation.

Truhan shows a cyclone type air/particulate concentrator and collector with improvements in the gas inlet scroll and the gas discharge scroll.

Pirsh shows a filter house having catalytic filter bags for removing NO_x and particulate matter.

None of the references shows a process for collecting particulates from a gas stream comprising the steps of **increasing** the **relative humidity** of the gas stream and **compelling** the gas stream to **interact** with a cold **solid surface**.

None of the references shows a particulate collector that relies on the **condensation** of water vapor on a **solid surface** as the primary principle of particulate collection.

Very respectfully,

Ronald F. Balingit

6320 Meadow Haven Drive
Agoura Hills, CA 91301
818 879 - 8526

ENC: PTO-1449 & References

LIST OF PRIOR ART CITED BY APPLICANT

(Use several sheets if necessary)

MAILING

APPLICANT

Balingit, R.F.

FILING DATE

2004 Feb. 20

GROUP

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA		4 0 6 1 4 7 8	1977	Hartwick	96	356	
AB		4 7 9 3 9 8 1	1988	Doyle, et al.,	423	239.1	
AC		4 9 2 7 4 3 7	1990	Richerson	55	349	
AD		5 6 8 3 4 9 4	1997	Altman, et. al.,	96	55	
AE		4 2 3 9 5 1 3	1980	Paul, et. al.,	96	48	
AF		4 2 4 6 0 1 3	1981	Truhan, et. al.,	55	340	
AG		4 3 0 9 3 8 6	1982	Pirsh	422	177	
AH							
AI							
AJ							
AK							

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
AL								
AM								

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AR		
AS		

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.